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INTERNATIONAL ATOMIC WEIGHTS, 1955.

[*Reprinted from the Report of the Commission on Atomic Weights to the 18th Conference of the International Union of Pure and Applied Chemistry, 1955.*]

	Symbol.	Atomic number.	Atomic weight.*
Actinium	Ac	89	227
Aluminium	Al	13	26·98
Americium	Am	95	[243]
Antimony	Sb	51	121·76
Argon	A	18	39·944
Arsenic	As	33	74·91
Astatine	At	85	[210]
Barium	Ba	56	137·36
Berkelium	Bk	97	[249]
Beryllium	Be	4	9·013
Bismuth	Bi	83	209·00
Boron	B	5	10·82
Bromine	Br	35	79·916
Cadmium	Cd	48	112·41
Cæsium	Cs	55	132·91
Calcium	Ca	20	40·08
Californium	Cf	98	[249]
Carbon	C	6	12·011
Cerium	Ce	58	140·13
Chlorine	Cl	17	35·457
Chromium	Cr	24	52·01
Cobalt	Co	27	58·94
Copper	Cu	29	63·54
Curium	Cm	96	[243]
Dysprosium	Dy	66	162·51
Erbium	Er	68	167·27
Europium	Eu	63	152·0
Fluorine	F	9	19·00
Francium	Fr	87	[223]
Gadolinium	Gd	64	157·26
Gallium	Ga	31	69·72
Germanium	Ge	32	72·60
Gold	Au	79	197·0
Hafnium	Hf	72	178·50
Helium	He	2	4·003
Holmium	Ho	67	164·94
Hydrogen	H	1	1·0080
Indium	In	49	114·82
Iodine	I	53	126·91
Iridium	Ir	77	192·2
Iron	Fe	26	55·85
Krypton	Kr	36	83·80
Lanthanum	La	57	138·92
Lead	Pb	82	207·21
Lithium	Li	3	6·940
Lutetium	Lu	71	174·99
Magnesium	Mg	12	24·32
Manganese	Mn	25	54·94
Mendelevium	Mv	101	[256]
Mercury	Hg	80	200·61
Molybdenum	Mo	42	95·95
Neodymium	Nd	60	144·27
Neon	Ne	10	20·183
Neptunium	Np	93	[237]
Nickel	Ni	28	58·71
Niobium	Nb	41	92·91
Nitrogen	N	7	14·008
Osmium	Os	76	190·2
Oxygen	O	8	16
Palladium	Pd	46	106·4
Phosphorus	P	15	30·975
Platinum	Pt	78	195·09
Plutonium	Pu	94	[242]
Polonium	Po	84	210
Potassium	K	19	39·100
Praseodymium	Pr	59	140·92
Promethium	Pm	61	[145]
Protactinium	Pa	91	231
Radium	Ra	88	226·05
Radon	Rn	86	222
Rhenium	Re	75	186·22
Rhodium	Rh	45	102·91
Rubidium	Rb	37	85·48
Ruthenium	Ru	44	101·1
Samarium	Sm	62	150·35
Scandium	Sc	21	44·96
Selenium	Se	34	78·96
Silicon	Si	14	28·09
Silver	Ag	47	107·880
Sodium	Na	11	22·991
Strontium	Sr	38	87·63
Sulphur	S	16	32·066 †
Tantalum	Ta	73	180·95
Technetium	Tc	43	[99]
Tellurium	Te	52	127·61
Terbium	Tb	65	158·93
Thallium	Tl	81	204·39
Thorium	Th	90	232·05
Thulium	Tm	69	168·94
Tin	Sn	50	118·70
Titanium	Ti	22	47·90
Tungsten ‡	W	74	183·86
Uranium	U	92	238·07
Vanadium	V	23	50·95
Xenon	Xe	54	131·30
Ytterbium	Yb	70	173·04
Yttrium	Y	39	88·92
Zinc	Zn	30	65·38
Zirconium	Zr	40	91·22

* A value given in brackets denotes the mass number of the isotope of longest known half-life.

† Because of natural variations in the relative abundance of its isotopes, the atomic weight of sulphur has range of ±0·003.

‡ I.U.P.A.C. lists wolfram as an alternative, but The Chemical Society reserves the name wolfram for the ore.

[*Copies of this Table, printed on card, may be obtained from the General Secretary, The Chemical Society, price 2s. 0d. each (post free).*]

EDITORIAL REPORT ON NOMENCLATURE, 1956.*

Introduction

These Reports are designed to collect each year changes in chemical nomenclature, and new nomenclature, adopted by The Chemical Society, provided that these have general interest or application. The present Report is again short and is confined to isolated items. This is not because there are no longer major problems in nomenclature requiring resolution—one has only to consider compounds such as tropolones or sydnones where the classical valency-bond conceptions and the nomenclature based thereon are inadequate, higher terpenes, enzymes, organic compounds requiring by present rules two suffixes (while only one is permitted), metal carbonyls, organoboron compounds, stereoisomerism, etc., or the more complex members of the series not covered by the existing carbohydrate or steroid rules. That no definitive rules have yet been formulated for these and many other cases is not due to the problems' being overlooked, or fully to lack of time for their consideration, or to the difficulties (real though they often are) of obtaining agreement among specialists from different countries. Work continues both at a national and at an international level, but progress is slow.

Inorganic

Elements.—The Table of International Atomic Weights, 1955, given on p. **4989**, includes the internationally recognized names of the elements. The transuranium elements listed are: neptunium (**93**), plutonium (**94**), americium (**95**), curium (**96**), berkelium (**97**), californium (**98**), and mendelevium (**101**). The names einsteinium and fermium which have been proposed for elements of atomic number **99** and **100** respectively have not yet received I.U.P.A.C. approval.

Complex Boric Acids.—The acid $H[B(HSO_4)_4]$ has been called tetra(hydrogen sulphato)boric acid (*J.*, **1956**, 1925). This name, though cumbrous, appears accurate and descriptive, and this type of name should be extensible to analogous compounds and ions.

Physical

Notation for Spectra of Polyatomic Molecules.—The report on this subject from the Joint Commission for Spectroscopy of the International Astronomical Union and the International Union of Pure and Applied Physics (**1954**) has been published in *J. Chem. Phys.*, **1955**, **23**, 1997. The notation there given should be adopted by authors for The Chemical Society's publications.

Rad.—The International Commission on Radiological Units has recently recommended (*Brit. J. Radiology*, **1954**, **27**, 243) that the general unit of absorbed dose, for all types of ionising radiation, should be the rad, of 100 ergs per gram (cf. *Ann. Reports*, **1955**, **52**, 44).

Demal.—The use of this description is increasing. A demal solution (D-solution) was originally defined as one containing 1 mole of solute per cubic decimeter of solution, in air at 0° (Parker and Parker, *J. Amer. Chem. Soc.*, **1924**, **46**, 312; cf. J., **1956**, 4464).

Organic

Organophosphorus Compounds.—The American–British nomenclature for compounds containing one phosphorus atom (*J.*, **1952**, 5122) has proved generally adequate in providing unambiguous names for compounds of this class, though the unfamiliarity and complexity of some aspects of these rules have as yet prevented their wide adoption in other countries. One gap has recently been disclosed: the rules do not prescribe for ions of the type PY_6^-. When

* Reprints of this Report, and of those for each of the years 1950, 1951, 1953—55, may be obtained from the General Secretary, The Chemical Society, price 1s. each (post free). It is regretted that the Report for 1952 is out of print.

these were encountered (see *J.*, 1956, 3043) recourse was had to the I.U.P.A.C. Tentative Rules for inorganic nomenclature; for instance, the compound $[(PhO)_4P]^+[(PhO)_2PCl_4]^-$ was named tetraphenoxyphosphonium triphenoxytrichlorophosphate, and others of the series analogously (cf. *J.*, 1956, 3051).

The ways in which some difficulties with compounds containing more than one phosphorus atom have been overcome are sufficiently illustrated by the following examples: *O*-benzylphosphorous *OO*-diphenylphosphoric anhydride for $Ph{\cdot}CH_2{\cdot}O{\cdot}P(OH){-}O{-}PO(OPh)_2$ (*J.*, 1956, 3459); P^1-cytidine-5′ P^2-glycerol-1 pyrophosphate (the systematic name for "cytidine diphosphate glycerol"), where one phosphorus atom in pyrophosphoric acid is combined in an ester group at the 5′-position of cytidine, and the other in an ester group at the 1-position of glycerol (*J.*, 1956, 4186; cf. cytidine diphosphate ribitol, *J.*, 1956, 4583).

$-SF_3$ and $-SF_5$ Groups.—Classical procedures provide no prefix for naming these groups in organic compounds. The difficulty is that the prefix sulpho refers to $-SO_3H$, and the English sulphuro (as in trifluorosulphuro) is singularly ill adapted for use in other languages (cf. French "soufre," German "Schwefel"). Although thio as a prefix refers strictly to the bivalent group $-S-$ (as in methylthio- for $MeS-$), it was in fact used (*J.*, 1956, 2684) as a basis in the names αα-difluoro-α-(trifluorothio)acetic acid for $SF_3{\cdot}CF_2{\cdot}CO_2H$ and chlorodifluoro(pentafluorothio)-methane for $CClF_2{\cdot}SF_5$; for the latter substance the alternative name, chlorodifluoromethylsulphur pentafluoride, was also given [it might have been better to write (chlorodifluoromethyl)sulphur pentafluoride, *i.e.*, with parentheses].

Peptides and Other Oligomers.—Some peculiar problems arise in naming substituted oligomers of precisely known structure. For example, glycylglycylalanine substituted on each nitrogen atom by an acetyl group would be most conveniently named *NN′N″*-triacetylglycylglycylalanine, the acetyl groups being all assembled into one prefix as indeed is good practice if glycylglycylalanine is treated as a single trivial name. Similarly, it appears simple to write *SS′*-dibenzyl-L-cysteinyl-L-cysteine. But, when, as in a recent paper (*J.*, 1956, 3148), substitution becomes more involved, and particularly when it is asymmetric, more readily intelligible names are obtained by treating each monomer unit as a separate complete nomenclature unit, serially, as in *S*-benzyl-*N*-benzyloxycarbonyl-L-cysteinyl-*S*-benzyl-L-cysteine benzyl ester. Occasionally it is even helpful (cf. *J.*, 1956, 3150) to insert additional hyphens, as in *S*-benzyl-*N*-benzyloxycarbonyl-L-cysteinyl-glycylglycine. In default of such devices there may be ambiguity as to which monomer unit is implied by *N*, *N′*, *N″*, *S*, *S′*, etc. Similar problems (and solutions of them) may arise for oligosaccharides or polyesters or polylactones.

Attention may also be drawn to the abbreviations for amino-acids used by The Chemical Society (cf. *J.*, 1956, 3697), following the practice of the Biochemical Society (cf. also Brand and Edsall, *Ann. Rev. Biochem.*, 1947, 16, 224). These abbreviations are to be used only for construction of abbreviated structural formulæ.

Phenethyl.—It is not always realised that the name phenethyl for $Ph{\cdot}\overset{\beta}{C}H_2{\cdot}\overset{\alpha}{C}H_3$, officially recognized by I.U.P.A.C. (cf. *J.*, 1952, 5096), may be used for substituted derivatives. It is thus correct to write, *e.g.*, 3 : 4-dihydroxyphenethyl (cf. *J.*, 1956, 513) or α-hydroxyphenethyl.

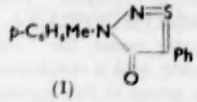
Tropone, Tropylium.—In deference to widespread practice, the name tropone is accepted in place of *cyclo*heptatrienone, and tropylium for the *cyclo*heptatrienyl cation (cf. *J.*, 1956, 2021), though the Editor personally doubts the necessity for such brevity or the ability of these names to express the novel concepts involved. Somewhat analogously, 4-hydroxytropone has been used (*J.*, 1956, 2620) to replace *iso*tropolone (admittedly perhaps an ambiguous description) (*J.*, 1954, 1060). However, as stated in the introduction to this Report, further consideration is required of the nomenclature of this class of compound.

Spirostans.—Final resolution of spirostan nomenclature awaits full proof of the stereochemistry involved. Authors should suit their nomenclature to the structures which they wish to express (cf. *J.*, 1956, 4330).

Quadrivalent Sulphur in Ring Systems.—Names were desired recently (*J.*, 1956, 3189) to express quadrivalent sulphur $=S=$ as a member of a ring system. The "a" nomenclature (aza, thia, etc.) was used in names such as 4-oxo-5-phenyl-3-*p*-tolyl-1-thia(S^{IV})-2 : 3-diazoline for the structure (I).

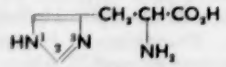
Methylhistidines.—The glyoxaline (iminazole, imidazole) ring has long and universally been numbered as in (II). Long custom (cf. Mitchell, "British Chemical Nomenclature," Arnold, London, 1948, p. 145) ascribes the numbering as in (III) to histidine, *i.e.*, as if that tautomeric form were the predominant or only one. It is therefore unfortunate that the compound (IV)

(a derivative of carnosine) is generally referred to in biochemical literature as 1-methylhistidine, whereas compound (V) (isolated from urine) is there generally termed 3-methylhistidine (cf. *Ann. Reports*, **1955**, **52**, **272**), *i.e.*, the usual numbering of histidine itself is reversed. Authors in the Society's publications are advised to use the older, recognized histidine numbering, together with formulæ.

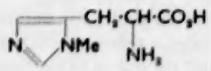


(I)

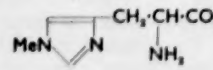
(II)



(III)



(IV)



(V)

Demethylene.—This prefix denotes, formally, replacement of CH_2 by two hydrogen atoms. It has been used (*J.*, **1956**, **3121**) to denote replacement of $-O\cdot CH_2\cdot O-$ by $-OH\ HO-$ when the complete structure of a molecule was not known.

Stereoisomerism.—Increasing difficulty and improvisation is encountered in designation of various forms of stereoisomerism, in absence of accepted general principles covering modern requirements. For instance, the prefixes *threo* and *erythro* have been borrowed from carbohydrate chemistry for use with hydroxy-aliphatic acids containing the grouping $-CH(OH)\cdot CH(OH)\cdot CH_2\cdot CH(OH)\cdot CH(OH)-$ (*J.*, **1956**, **1611**) and with amino-acids (*J.*, **1956**, **1662**); *cisoid* and *transoid* have been brought into use for aliphatic isomers each in a special conformation (*J.*, **1956**, **2280**); the proper use of *exo* and *endo* in polycyclic systems is open to argument in some cases, and definition is often desirable in specific cases (cf., *e.g.*, *J.*, **1956**, 2302). For substituted long-chain acids of known absolute configuration, *D* and *L* have had further application (*J.*, **1956**, **1620**, **2036**) with the conventions laid down by Linstead, Lunt, and Weedon (*J.*, **1950**, **3333**); for alkylamines and related amino-aldehydes of known absolute configuration, (*R*) and (*S*) introduced by Cahn, Ingold, and Prelog (*Experientia*, **1956**, **12**, 81) were adopted. The Editor, being personally involved in sponsorship of a particular system for general designation of absolute configuration, would prefer authors to select their own system in this particular respect until some independent authority may rule otherwise.

The use of *d* and *l* in connexion with octahedral groupings (*J.*, **1953**, **2675**) has continued (*J.*, **1956**, **1710**).

Desilylation.—The editorial report on nomenclature, **1954**, contained suggestions by Dr. J. F. Bunnett for description of reactions in which a group or atom, X, is replaced by another, Y: it was there stated that these suggestions might prove useful but should be used with discretion. Recently (*J.*, **1956**, **4859**) a brief description was required for replacement of the group $-SiMe_3$ by hydrogen. Strict application of Dr. Bunnett's process would have led to the term protodetrimethylsilylation: this could reasonably be shortened to detrimethylsilylation; but even that appeared too formidable and, instead, the abbreviated "desilylation" was used, though the resulting loss of precision was recognized (desilylation should refer to replacement of any group $-SR_3$ by H, or, strictly, only $-SH_3$ by H).

General

Concentrations expressed as %.—It should be noted that concentrations expressed simply as "*x*%" apply to % (w/w), *i.e.*, *x* grams of solute in **100** grams of solution. If concentrations are expressed as grams of solute in **100** ml. of solution, they must be specified as "*x*% (w/v)." Other well-recognized forms, such as M, N, *c* (for optical-rotation measurements), may of course be used without explanation; but if other units are chosen they must be clearly specified.

Solvent mixtures for, *e.g.*, chromatography, expressed as ratios, as in "benzene–ether (3 : 2)," are held to refer to relative volumes of the individual solvents used.

"*Personal Communications.*"—Unpublished information from other workers is often acknowledged in the form "A.B.C—, private communication" or "private communication from Dr. A.B.C—." However, "private" communications should not be divulged, and the form "personal communication" is therefore now used in the Society's publications.

Legends for Illustrations.—The Society's printers, in common with most others, now require that legends for illustrations shall form part of the manuscript, and not merely be placed on the diagram itself. Legends are most conveniently handled if typed on a separate sheet (which should be given a page number).

References.—The conventions used in citing references as footnotes were detailed in *Proceedings*, 1955, pp. 78—81 (also available as an offprint). Experience has shown that one change is required. Since the position of Tables and Figures on the final printed pages cannot be guaranteed, difficulty may arise if references cited there for the first time are numbered consecutively with references in the main text. References in Figures and Tables are best cited by letters (italics), being then listed as footnotes immediately below the appropriate Table or Figure; alternatively they can sometimes be given in the parenthetical form which was previously obligatory throughout the *Journal*.

The considerable saving of space achieved when several references to one fact are put together in one group should be noted; and finally attention is drawn again to the details given in *Proceedings* and the need for following them strictly, as well as to the forms of abbreviated titles of journals listed in the January issues of *Current Chemical Papers* and in recent volumes of *Annual Reports*.

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Nomenclature Report, and Indexes

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ERRATA

Vol. 1947, page 313, line 38. *For* b. p. 148—150°/22 mm. *read* b. p. 148—150°.

Vol. 1953, page 236, line 7*. *For* m. p. 134—185° *read* 134—135°.

Vol. 1953, page 1900, formula (III). *For* :COPh *read* :CHPh.

Vol. 1954, page 1686, lines 33 and 34. The analytical results *should read* (Found: C, 67·5; H, 5·9; N, 4·1. $C_{20}H_{21}O_5N$ requires C, 67·6; H, 6·0; N, 4·0%).

Vol. 1955, page 383. The arrows between formulæ (X) and (XII) should be reversed.

Vol. 1955, page 1700, line 17*. *For* 2·16 *read* 1·83. *For* 1·98 *read* 1·30.

Vol. 1955, page 2480, summary, line 4. *For* 1*h*0, 0*hl*, and 1*h*$\bar{1}$ *read* 1*h*0, 0*h*1, and 1*h*$\bar{1}$.

Vol. 1955, page 2481, line 11. *For* while 0*hl* and 1*h*$\bar{1}$ were *read* while 0*h*1 and 1*h*$\bar{1}$ were.

Vol. 1955, page 4023, Table 2. *For* 0·90 *read* 0·090. *For* 0·82 *read* 0·082.

Vol. 1955, page 4024, 2nd line above Table 4. *For* 1·120M-sodium hydroxide *read* 1·120M-potassium hydroxide.

Vol. 1956, page 4, line 30. *For* $C_2H_{188}O_4$ *read* $C_{20}H_{18}O_4$.

Vol. 1956, page 212, line 8. *For* $\log_{10} p$(mm. Hg) = 7·035—1278/(t°c + 219·3°) *read* $\log_{10} p$(mm. Hg) = 7·145—1329/(t°c + 224·0°).

Vol. 1956, page 249, line 3*. *For* C, 60·5 *read* C, 66·5.

Vol. 1956, page 249, line 4*. *For* C, 66·5 *read* C, 60·5.

Vol. 1956, page 361, line 3*. *For* R = H *read* R′ = H.

Vol. 1956, page 531, formula (VI*A*). There should be a single bond between the central oxygen atom and the nearest position on the left-hand benzene ring.

Vol. 1956, page 672. Equation (3) *should read* $K^{-1} = 4\pi N\rho(2q_1)^3 \int_{2q_1/\sigma}^{2q_1/q} e^{y^2} y^{-4}\,dy$.

Vol. 1956, page 700, formula (XIII). The thiophen ring should be completed.

Vol. 1956, page 893, formulæ. In the right-hand ring of the 3-isomer NH *should read* NH_2.

Vol. 1956, page 967. Second table *should read*:

$SiHCl_3$ (mmoles)	C_2F_4 (mmoles)	Mole ratio $SiHCl_3 : C_2F_4$	$CHF_2{\cdot}CF_2{\cdot}SiCl_3$ Wt. (g.)	$CHF_2{\cdot}CF_2{\cdot}SiCl_3$ Yield (%)	$H{\cdot}[CF_2{\cdot}CF_2]_m{\cdot}SiCl_3$ (g.)
82·5	68·5	1·2	5·4	34	4·8
110	,,	1·6	7·1	44	4·0
220	,,	3·2	9·8	61	3·1
275	,,	4·0	10·1	63	3·0

* From bottom of main text.

Errata.

Vol. 1956, page 1097, line 7. *For* monomethylhydroxylamine *read* monopropylhydroxylamine.

Vol. 1956, page 1150, line 6. *For* 1-acetoxymethyl-2-oxo*cyclo*pentanecarboxylate *read* 1-acetoxymethyl-2-oxo*cyclo*hexanecarboxylate.

Vol. 1956, page 1302, line 7. *For* $-[H^+]$ *read* $+[OH^-]$ *and for* $+[H^+]$ *read* $-[OH^-]$.

Vol. 1956, page 1554, line 35. *For* 96% *read* 86%.

Vol. 1956, page 1559, last line of text. *For* $A_{1g} \longrightarrow B_{2u}$ *read* $A_{1g} \longrightarrow B_{1u}$.

Vol. 1956, page 1818, line 6*. *For* all but the two cases *read* all but two cases.

Vol. 1956, page 1818, line 1*. *For cyclo*propane *read cyclo*propene.

Vol. 1956, page 1819, line 16. *For* w/v *read* w/w.

Vol. 1956, page 1819, line 15*. *For* C=C *read* C=O.

Vol. 1956, page 1848. On the arrow leading from (XIV) to (XV) *for* Na *read* NaI.

Vol. 1956, page 1970, line 2*. *For* $\psi_2 = \sqrt{\frac{1}{2}}(\phi_1 - \phi_2)$, $\psi_3 = \sqrt{\frac{1}{2}}(\phi_3 - \phi_4)$
read $\psi_2 = \frac{1}{2}(\phi_1 + \phi_2 - \phi_3 - \phi_4)$
$\psi_3 = \frac{1}{2}(\phi_3 + \phi_2 - \phi_4 - \phi_1)$

Vol. 1956, page 1971, figure. The four-membered ring should be rotated through 45° about the *z* axis in the direction *x* to *y*.

Vol. 1956, page 2000, lines 1—2 under formulæ. *For* 2 : 4-diamino-1′-*n*-propyl(2′ : 3′-6 : 7)pteridine *read* 2 : 4-diamino-1′-*n*-propylindolo(2′ : 3′-6 : 7)pteridine.

Vol. 1956, page 2004, Table 2, heading. For *et* read *at*.

Vol. 1956, page 2168. *In* Table 4, *the five entries* 5 : 6 enol *should all read* 1 : 6 enol.

Vol. 1956, page 2210, Table 4, last column. The last three entries should read *l*, *m*, *n*, respectively.

Vol. 1956, page 2701, title. *For* Akhookh *read* Akhnookh.

Vol. 1956, page 3311. *For* Part III.[1] *read* Part III.* *Footnotes should read* : * Part II, *J.*, 1956, 2131.
[1] Albert, Brown, and Wood, *J.*, 1956, 2066.

Vol. 1956, page 3311, summary, lines 4 and 5. *For* 5-amino-4-methylpyrimidines *read* 5-amino-4-methylaminopyrimidines.

Vol. 1956, page 3366, Table 3. *Column headings should read* : Cols. 4—6 E = amount (mmoles) of solute absorbed.* Cols. 7—9 G = wt. (g.) of H_2O absorbed.*

Vol. 1956, 3370, Fig. 8. The labels *A* and *C* should be interchanged.

Vol. 1956, page 3476, figure. The molecular extinction coefficients corresponding to the tie-stubs on the left of the figure should read (from top to bottom) : 50,000, 10,000, 5,000, 1000, 500, 100 (*i.e.* each stub should be numbered).

Vol. 1956, page 3661, Fig. 4. Right-hand scale should read *log* ε (*curves J* and *K*).

* From bottom of main text.

Errata.

Vol. 1956, page 3949, Fig. 2. The ordinate should read $1/\chi_M$.

Vol. 1956, page 3950, Fig. 3. The ordinate should read $1/\chi_M$.

Vol. 1956, page 4597, line 15. *For* m. p. 161—169° *read* m. p. 168—169°.

Vol. 1956, page 4598, line 7*. *For* C, 15·8 *read* C, 45·8.

Vol. 1956, page 4641, Fig. 2(*b*). The captions for the full and broken line should be interchanged.

Vol. 1956, page 4678, line 2*. *For* hydrolysis product *read* product of hydrolysis at room temperature.

* From bottom of main text.

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